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Shaping Energies, LLC

Closed Cell Spray Foam

Closed cell spray foam is generally used to insulate your foundation, but you can use it to insulate anything you want! The reason why closed cell foam is primarily used to insulate your foundation is because of its very low permeability to water vapor and it keeps the moisture out. As we all know, basements tend to have some moisture! Consequently, closed cell spray foam acts as a vapor barrier in many applications and it serves at least two purposes when installed at foundation walls. Our clients tell us (all the time!) about how the musty smell is gone, the moisture stays out, and how much brighter it is in the basement! Closed cell foam also expands to fill every crack and keeps rodents out. One time we were contracted to insulate a basement just to keep a family of skunks out! Restaurants have hired us to keep the pests out as well.

Your home will feel completely different after you install closed cell foam at the basement walls! Closed cell spray foam can be applied to nearly any surface, and it makes sense from an efficiency standpoint to install it everywhere, but it is generally more economical to limit your closed cell foam installation to the locations that require it (like the basement foundation walls and narrow cavities like vaulted ceilings that are narrow in older homes). Shaping Energies' closed cell foam has an R-value of R6.9/inch! That's more than 200% of the insulating level of fiberglass.

Properly insulated foundation walls:

- Reduce heat loss from the foundation to outside.
- Keeps your basement warmer in the winter; it generally becomes the warmest room in the house because your furnace and hot water pipes are down there.
- Keeps the air cleaner for your heating system to burn with.
- Reduces the relative humidity of the air in the basement (and by default improves the overall air quality in your home [less moisture means less funny smells])
- Reduces the possibility of condensation on in the basement.
- Reduces the possibility of structural or framing members wicking enough moisture from the air to compromise their integrity (framing members should generally be below 17% moisture content if/when tested).
- Reduces the possibility of rotting structural and/or framing members.
- Reduces the moisture content of the air that the furnace or boiler burns with; this improves the combustion efficiency of your heating system and reduces corrosion inside the heating system. Higher heating system efficiency also reduces carbon monoxide and soot which increases the need for you to clean your system and further reduces its efficiency. Soot on the heat exchanger reduces the system's efficiency, and soot on the burner nozzle can impede the gas flow and damages the flame which further reduces the system's efficiency. Carbon monoxide can be a safety hazard if it escapes the chimney and ends up in your home, and problems with combustion efficiency due to basement moisture, carbon monoxide, and soot, all lead to fluctuations in stack temperature and higher chances of corroding the heat exchanger which increases the chances that the heat exchanger will crack and carbon monoxide will start escaping the chimney through the heat exchanger and pump directly to your supply registers - if you have a furnace - further creating health and safety hazards in your home.

Call or email us for a free estimate, or fill out the form at www.shapingenergies.com/closed-cell-spray-foam.html to receive an instant quote and schedule your project instantly when you submit the form. You can view our schedule and availability at the right side of the screen. We will contact you within 24 hours to verify your project details.

Note: You can download the MSD sheets that contain all of the technical information regarding the closed cell spray foam product Shaping Energies installs (Thermoseal 2000) at <http://www.shapingenergies.com/resources.html>